



Land Conservation Conference

**2020 Vision & Beyond:**

*Climate, Conservation & Collaboration*

***Delmarva Restoration and Conservation Network***

presented by Dan Murphy, U.S. Fish & Wildlife Service &

Josh Hastings, Lower Shore Land Trust

Wednesday, May 20<sup>th</sup>, 2020

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Forever Maryland***



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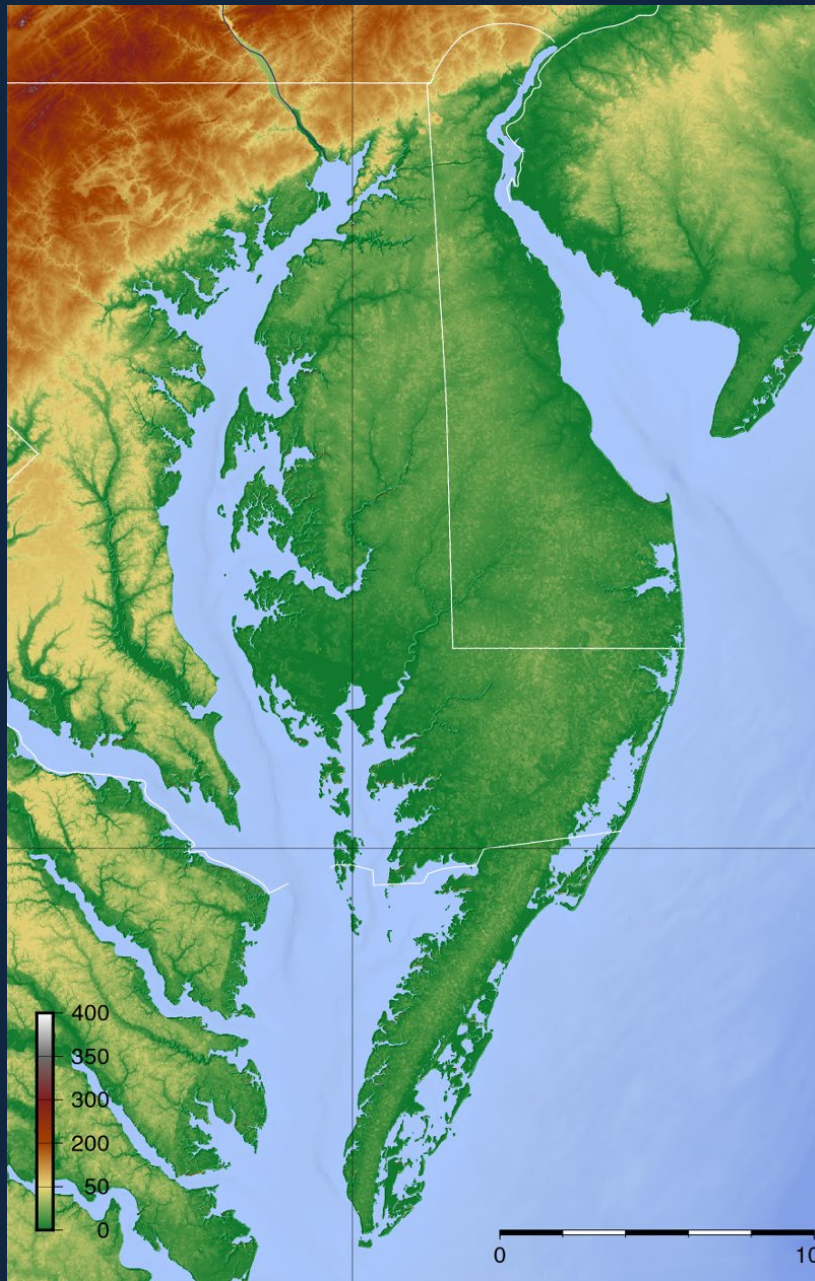
**Merritt Pridgeon**

# Delmarva Restoration and Conservation Network

Forever Maryland  
May 20, 2020

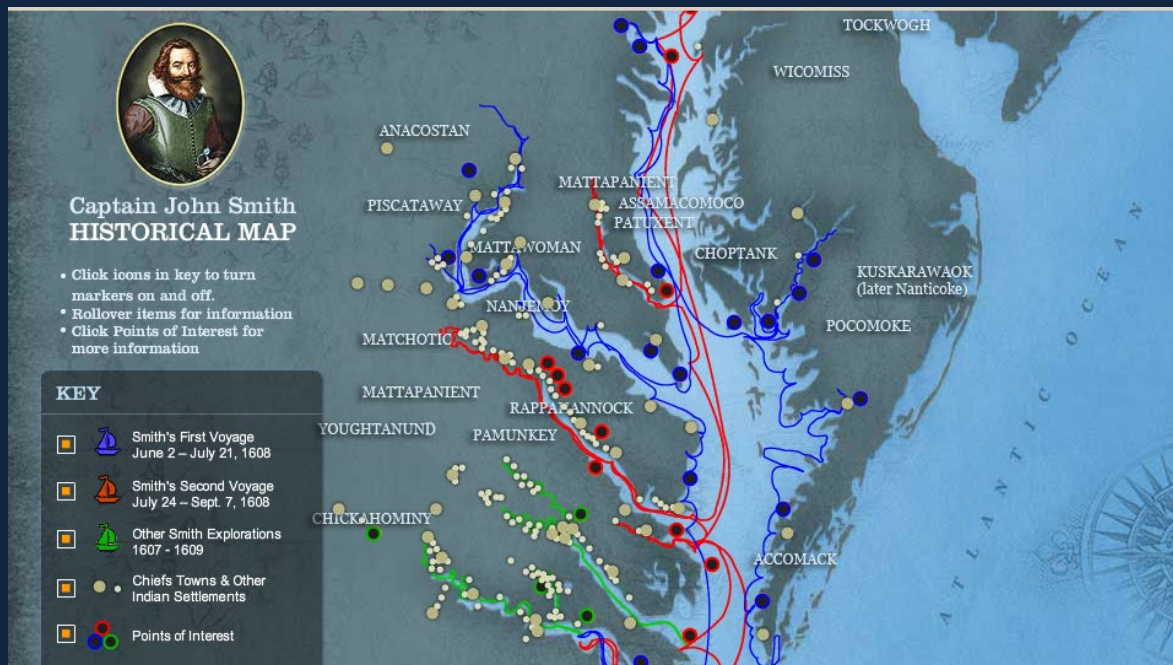






## *DELMARVA*

- Three States and 13 Counties
- 6,000 Square Miles
- 2,500 Miles of Coastline
- Average Elevation – 35 feet
- 180 Miles from North to South
- Up to 60 Miles East to West
- Population – 1,444,288



20,000 Accomacks, Accohannoeks, Nanticokes, Choptanks, Assateagues, Wicomicos, and Pocomokes in 1600

Spanish Missionaries – 1570

John Smith – 1608

Late 1700's

140 Nanticokes  
120,000 Europeans

# Agriculture



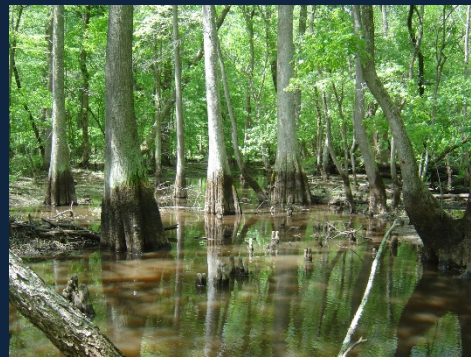
## Land Use

48% Agriculture

7% Urban

Prior to 1930 – Bread Basket of the Mid-Atlantic: Dairy Farms, Orchards, Tomatoes, Strawberries, Sweet Corn, Snap Beans – Many Small Farms

Now - Chickens and Chicken Food – Fewer, Larger Farms



# Commercial Fishing

Oysters



Blue Crabs





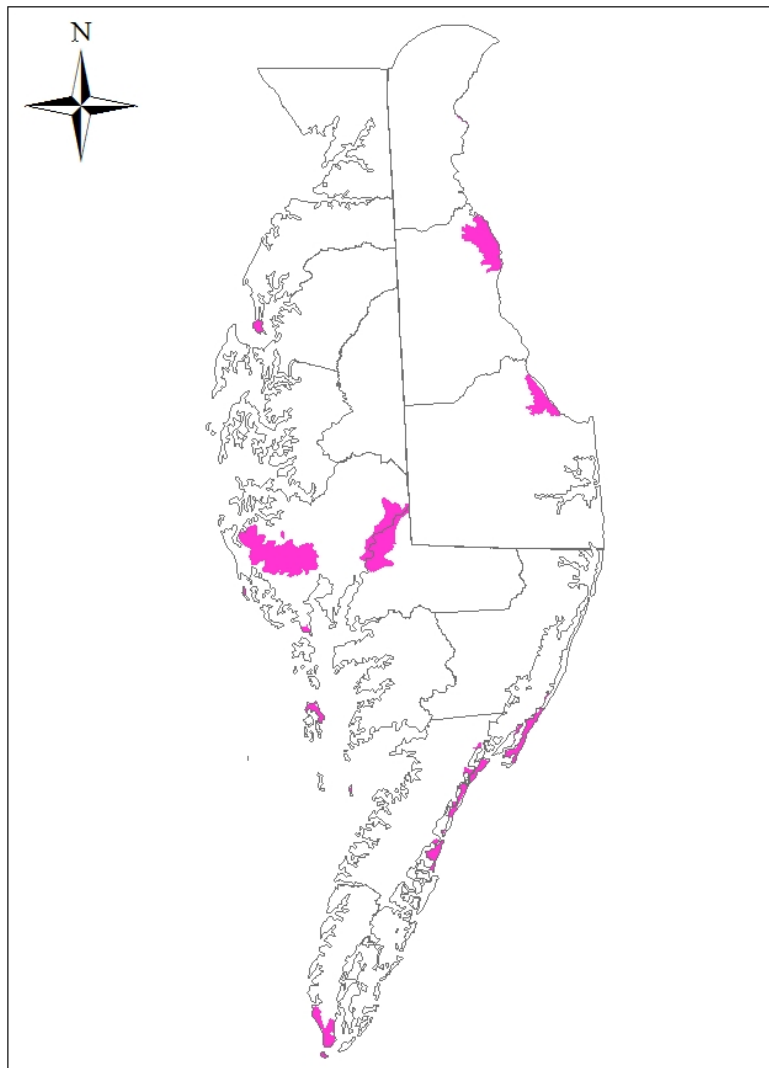
# Economics of Delmarva's Natural Lands, Farmland, and Open Space\*

- Outdoor enthusiasts spend up to \$3.9 billion per year supporting 27,900 jobs;
- 7,000 farms yield \$2.8 billion in farm products per year on 1.3 million acres;
- Commercial fishing in the Chesapeake Bay is worth \$300 million per year;
- Delmarva Peninsula fishery leads the nation in total weight of catch;
- All told, contributes over \$15 billion in ecological Services annually, supporting important Industries like fisheries and tourism;
- Conservation, aquaculture, and conservation visitor spending contributed \$270 million dollars to Virginia's Delmarva in 2016.



\*A 2012 study on the economics of natural areas (including farmland) on Delmarva by Southwick Associates & a socio-economic study by the Virginia Coastal Zone Management Program.

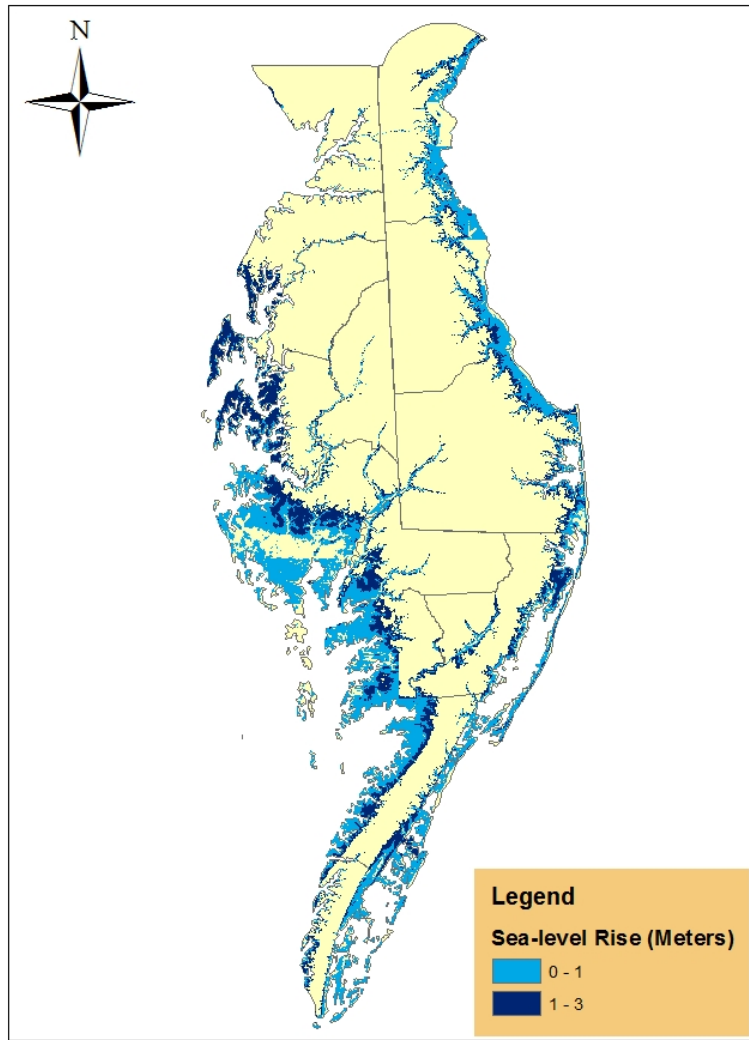
## Delmarva Restoration and Conservation Network Delmarva National Wildlife Refuges



0 10 20 40 Miles



### Delmarva Restoration and Conservation Network Sea-level Rise



0 10 20 40 Miles



### Delmarva Restoration and Conservation Network Probability of Development by 2080



0 10 20 40 Miles



# Delmarva Restoration and Conservation Network



## Strategic Action Plan

- Conservation Design + Business Plan
- Protect the Delmarva countryside.
- What needs to be done and where?
- How we will work together to get support and funding for voluntary restoration and conservation on Delmarva.
- 102 People from 42 Organizations



# **The Delmarva Restoration and Conservation Network**

## **Vision, Mission, and Goals**

### **Mission**

To restore and conserve Delmarva's landscapes, waterways, and shorelines that are special to its people, fundamental to its economy, and vital for its native fish, wildlife, and plants.

### **Vision**

We envision a Delmarva where native fish and wildlife thrive; the fabric of healthy natural and working lands and waters enrich the lives of those who live, work, and play on the land; and rich forestlands and coastal areas support and sustain present and future generations.

## **Delmarva Restoration and Conservation Network Goals**

**Goal 1** – Shape and support a network of cooperative alliances among the diversity of people, governments, organizations, and industries that rely on Delmarva’s natural resources.

**Goal 2** –Enhance the Sustainability of resource-based industries -- including fisheries, agriculture, forest products, tourism, and outdoor recreation -- that enable the economies of Delmarva communities to thrive.

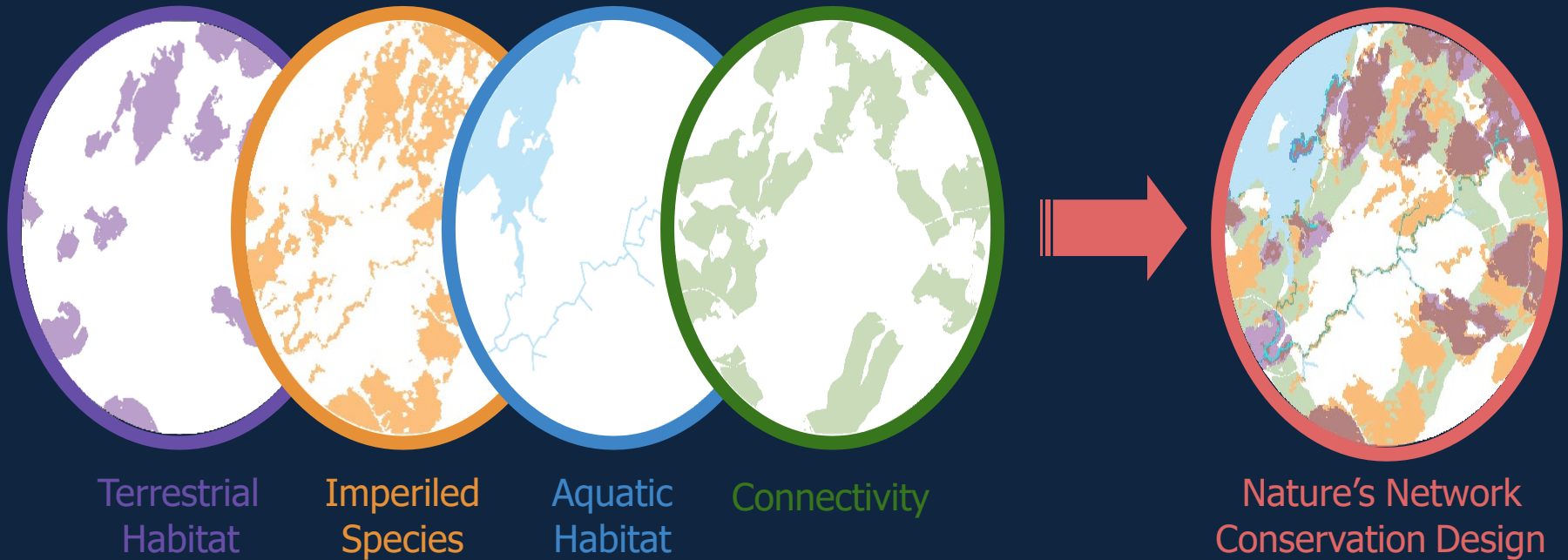
**Goal 3** - Identify, conserve, restore, and manage the vital network of working and natural lands and waters that support a diversity of habitats for native fish and wildlife, and maintain resiliency in the face of future development and climate change for present and future generations.

# Delmarva Restoration and Conservation Network Representative Species (47)



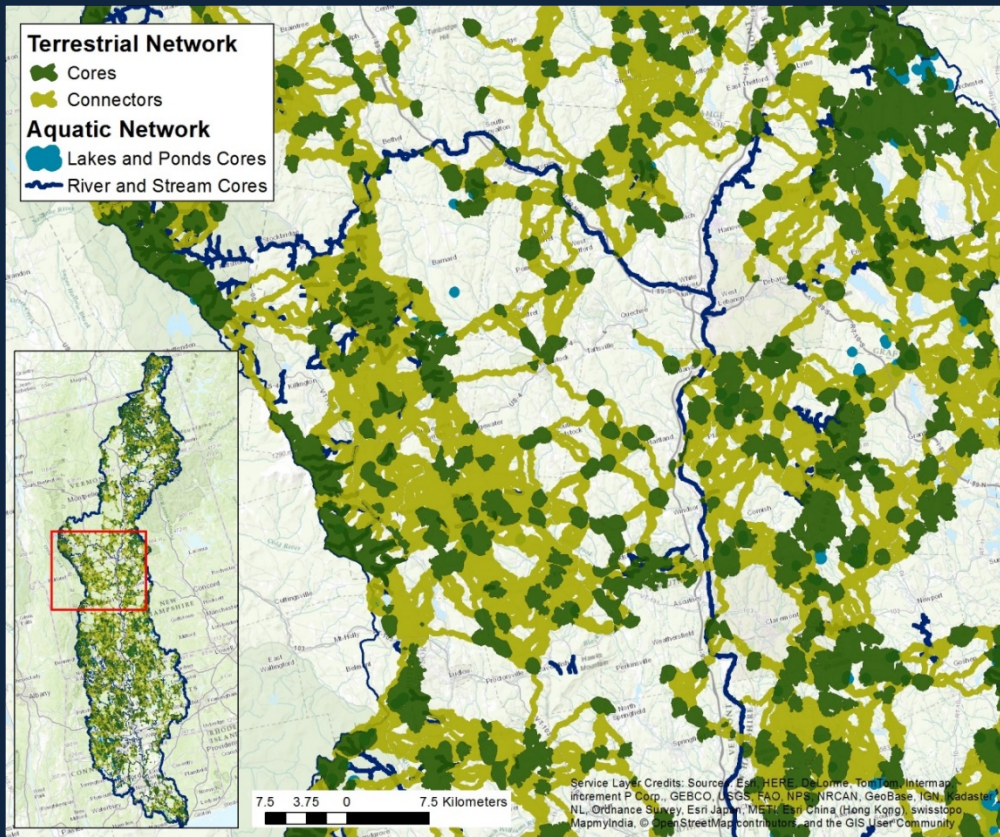
# The conservation design

[www.naturesnetwork.org](http://www.naturesnetwork.org)

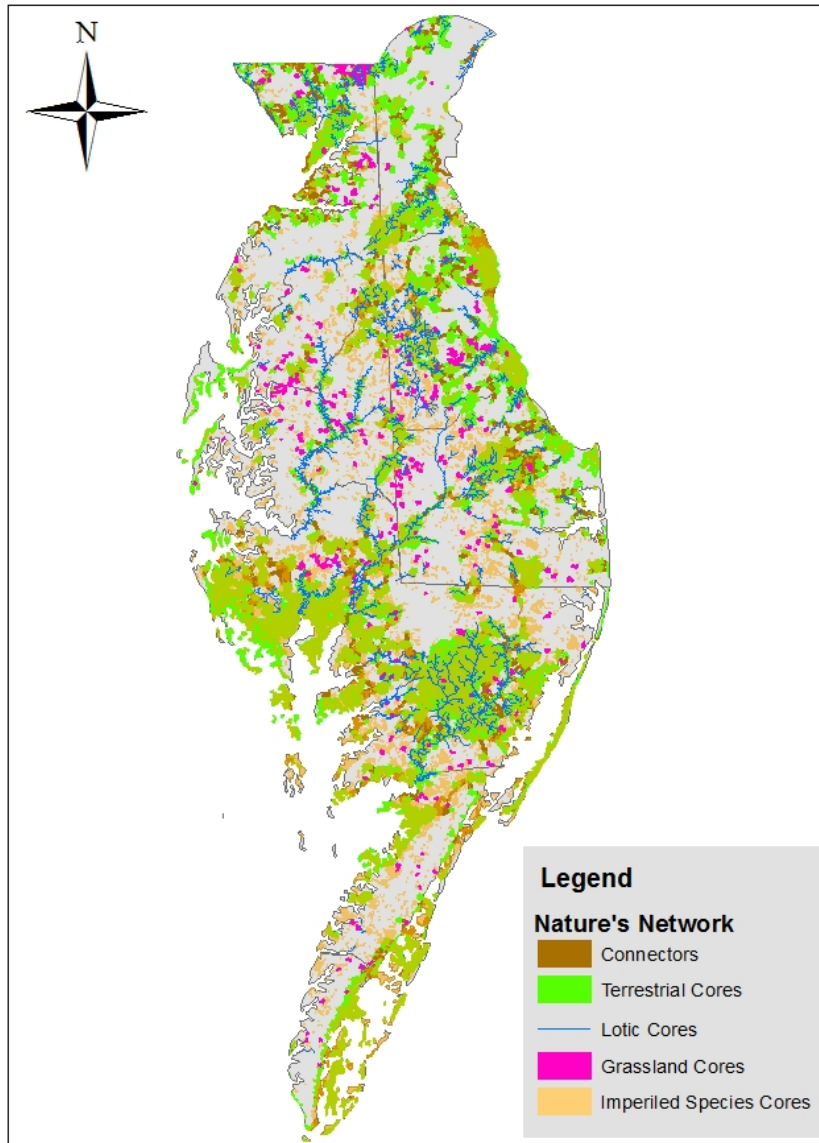


The key features of each of the four components are integrated in one map for Nature's Network Conservation Design, but many complementary data layers are available to support conservation planning.

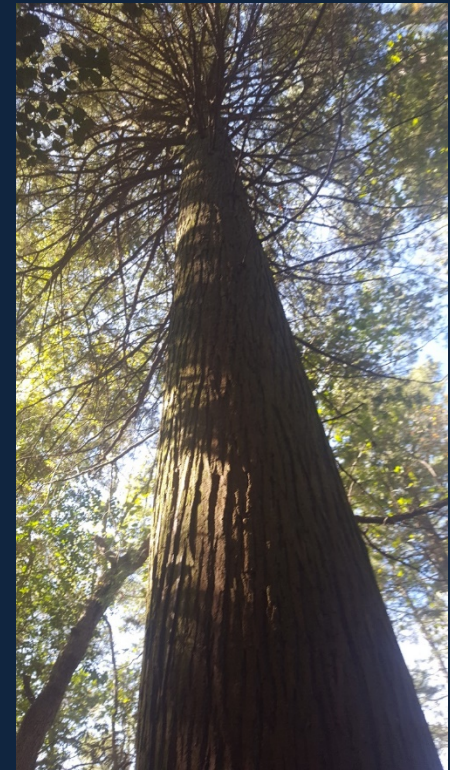




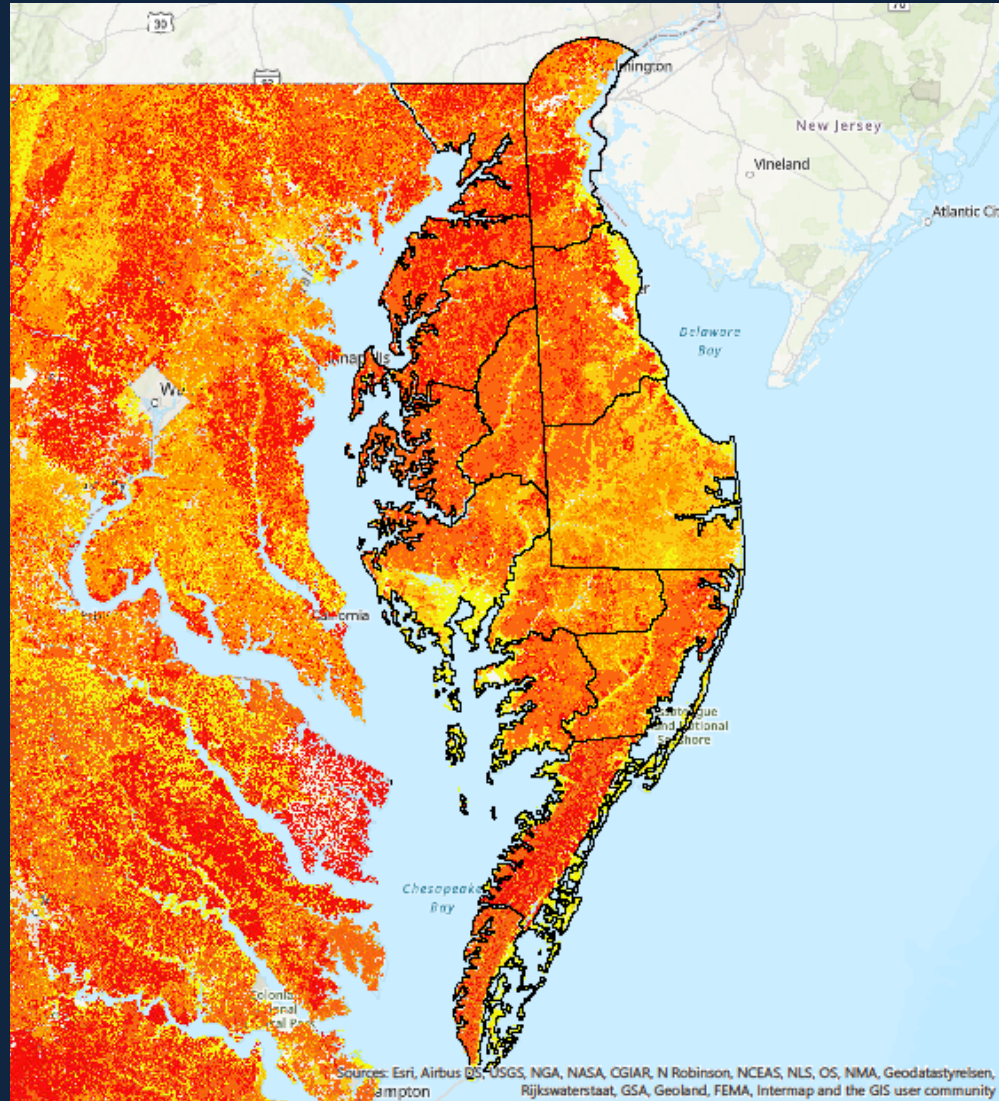
# Delmarva Restoration and Conservation Network Nature's Network Core Map



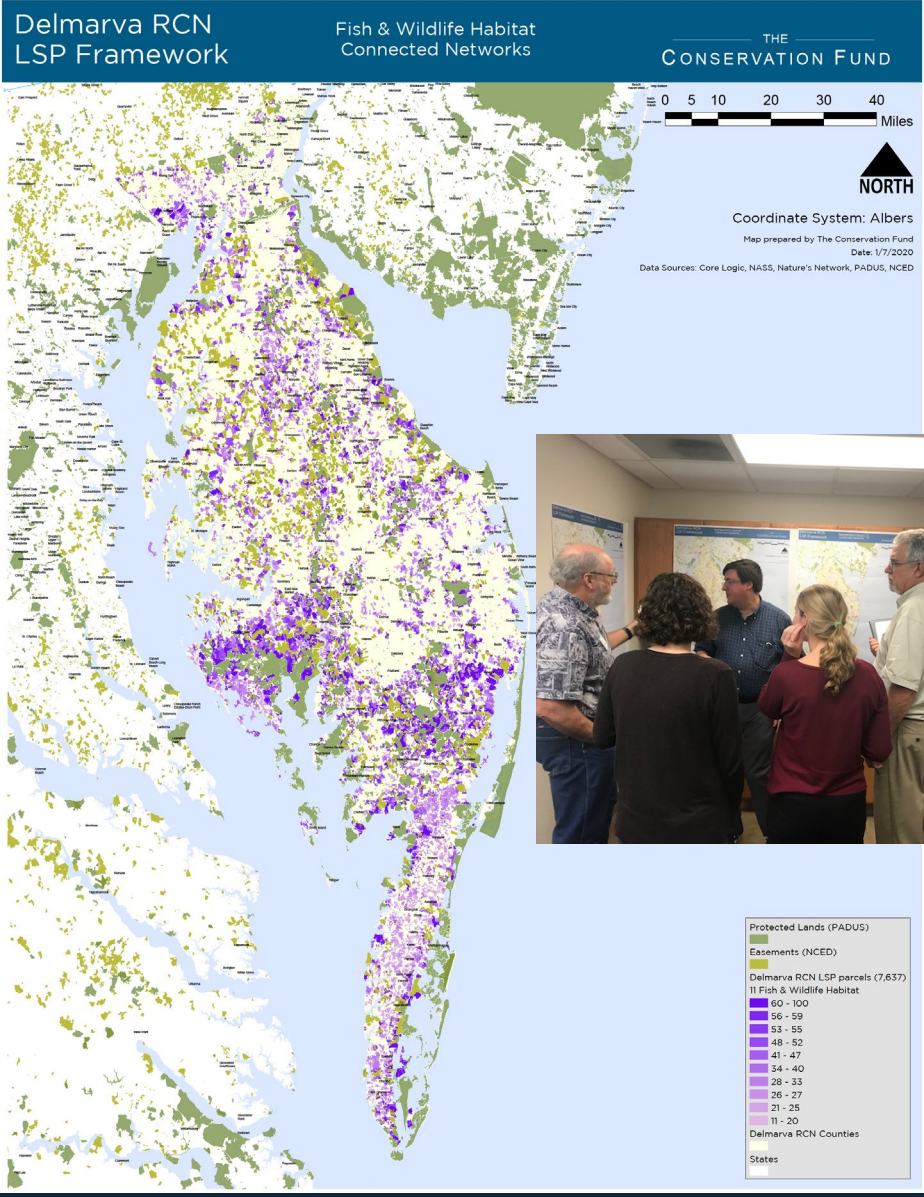
0 5 10 20 Miles



# Soil Productivity



# Structured Decision Making Workshop – Logic Scoring of Preference Model



DELMARVA RCD WORKSHOP – FEEDBACK FORMS – OCTOBER 9, 2019  
**PLEASE RETURN BEFORE YOU DEPART THE WORKSHOP**

## Station 1 - Fish & Wildlife Habitat

Review Maps and provide feedback below:

- 1a) Connected Network Features (111)
- 1b) Connected Networks Parcel Map (111)
- 1c) Representative Species Landscape Capability (112)
- 1d) Representative Species Parcel Map (112)

A. How would you weight the relative factors for parcels to meet fish and wildlife habitat protection objectives? (Total should equal 100)

*Fish and Wildlife Connected Networks* \_\_\_\_\_  
*Representative Species Landscape Capability* \_\_\_\_\_  
*Proximity to Existing Protected/Managed Lands* \_\_\_\_\_  
 100%

How would you weight the relative factors for parcels to meet fish and wildlife habitat protection objectives? (Total should equal 100)

*Total Acreage of Connected Network Designations within the Parcel* \_\_\_\_\_  
*Percent of Parcel with Connected Network Designations (50-100%)* \_\_\_\_\_  
*Total Parcel Size* \_\_\_\_\_  
 100%

What percent suitability would you give for the number of representative species likely to occur on a parcel (values must be between 0-100)?

# Species	% Satisfaction
5	100
4	_____
3	_____
2	_____
1	_____
0	0

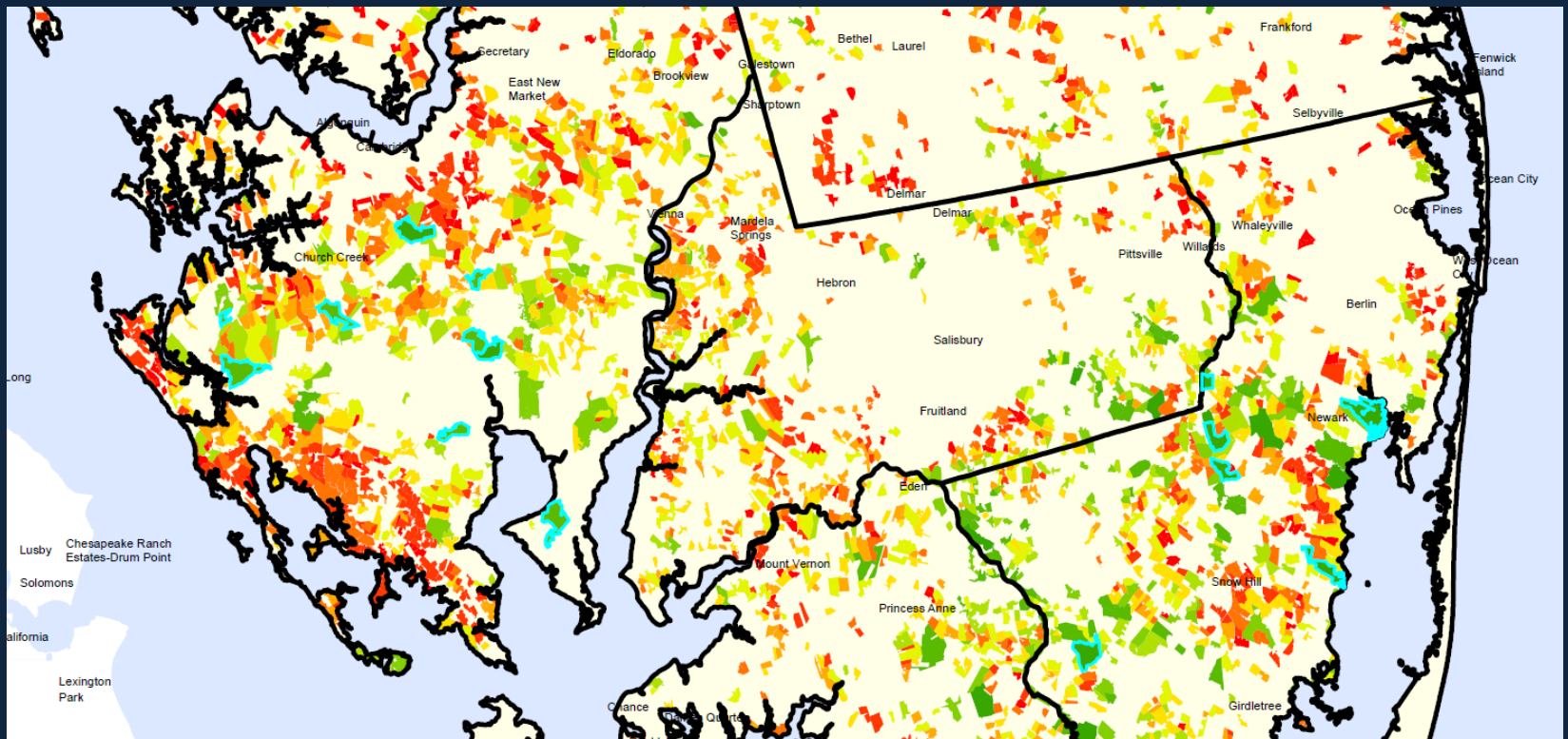
D. Are there any other considerations for fish and wildlife habitat you would like to see given the available data on the maps? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(Optional) Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_  
 e-Mail: \_\_\_\_\_ Phone: \_\_\_\_\_

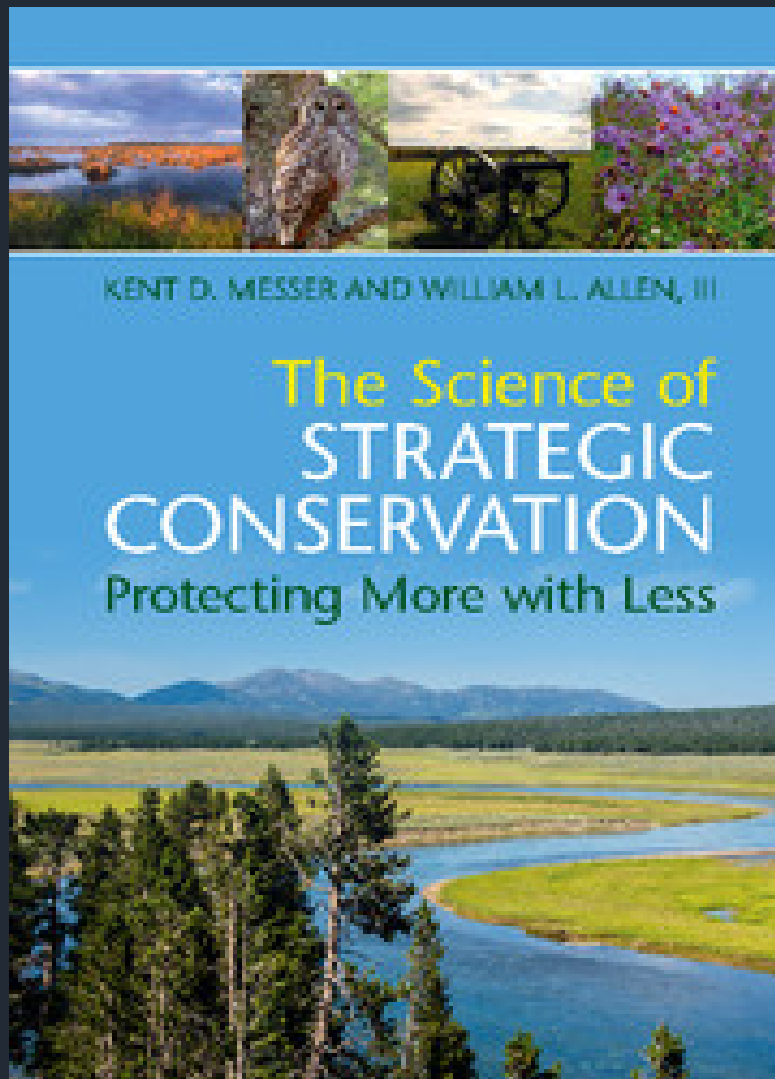
## Station 2 - Water Quality

# Optimization

Method	# Projects	Acres	Mean LSP Score (0-100)	Aggregate LSP Value
Cost-Effective Analysis	24	12,502	86.0	2,065
Rank-Based Method	21	9,987	72.1	1,515



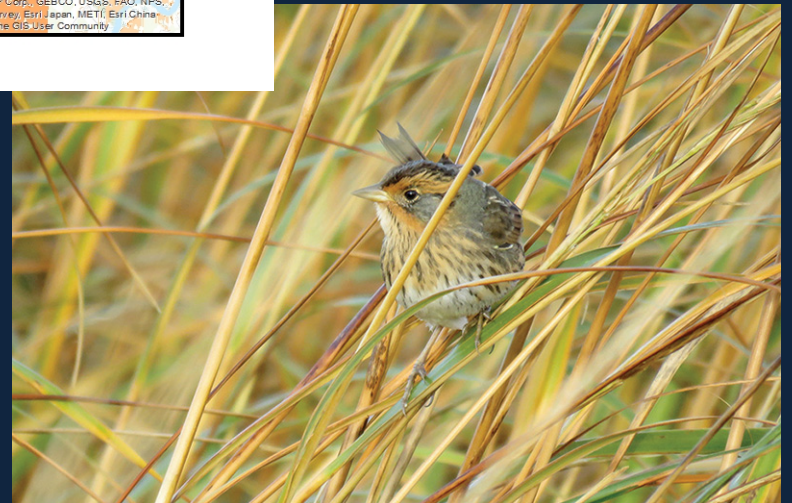
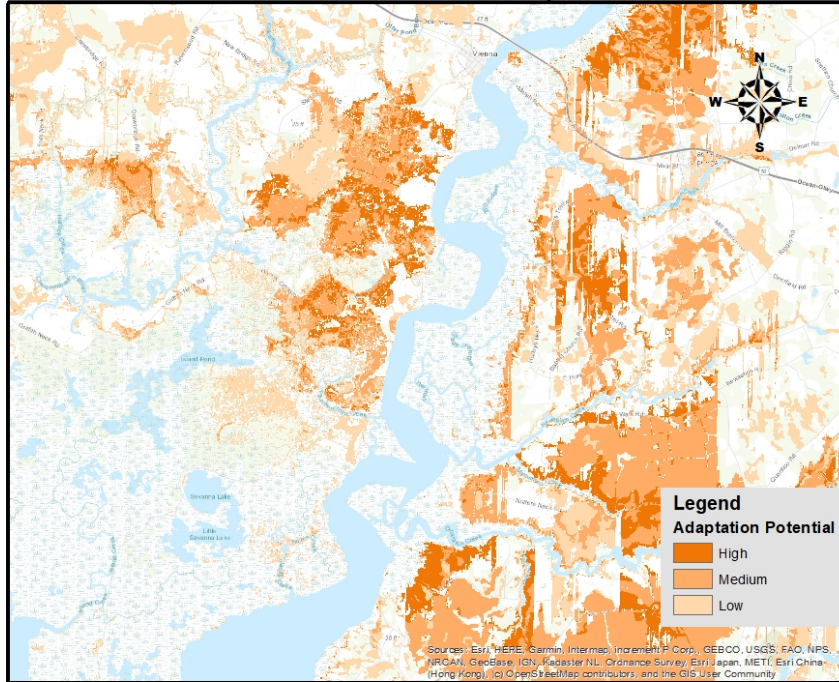
*For more information...*



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- [Kent D. Messer](#), University of Delaware , [William L. Allen, III](#), The Conservation Fund, Chapel Hill, USA
- Print publication year: 2019
- Online ISBN: 9781108123778

# Delmarva Restoration and Conservation Network Pilot Project

Sea-Level Rise Wetland Adaptation Zones



# Delmarva Restoration and Conservation Network

## Next Steps:

- Follow up on creation of [DRCN Story Map](#)
- Finalize physical report, print, and distribute to decision makers and partners
- Finalize the Strategic Action Plan
- Support distinct conservation projects under a shared vision – with the use of private, local, state, federal, and collective funds





# Delmarva Restoration and Conservation Network

## How is this *more than just another* Regional Partnership?

### RELATIONSHIPS:

- Build from bottom up/no egos
- Network for Landscape Conservation

### INNOVATIVE:

- Marsh migration corridors & giving a solution to State gov
- Partnership with Chesapeake Conservancy – 1-meter resolution
- Utilize new (potential) resources including Chesapeake Watershed Investments for Landscape Defense (Chesapeake WILD) Act



# Delmarva Restoration and Conservation Network: Our Challenges & Tips...

## Challenges:

- Corporations aren't coming to save the day, unless...
  - Employee engagement or “Projects or Programs”
- Foundations usually want specific results
- “Funding the bus and the bus driver”

## Tips:

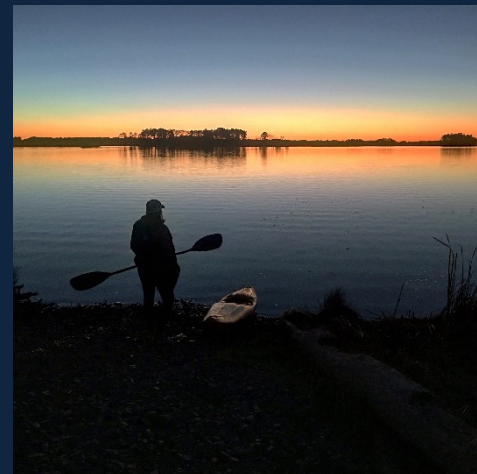
- Go BIG. Its more fundable.
- Go slow (minimal social media or web presence)
- Regional approach is *STILL* more acceptable with local politics
- University partnerships & technology *STILL* important
- Local NGO lead with national/regional backing...
- Dream it. Do it. (No, really...)

# Delmarva Restoration & Conservation Network

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